

Permit Fact Sheet

General Information

Permit Number:	WI-0065919-02-0
Permittee Name:	Ron Ziegler Farm
Address:	N368 Hwy 51
City/State/Zip:	DeForest WI 53532
Discharge Location:	N368 Hwy 51, Deforest WI, 53532; Columbia County WI, Town of Leeds, W ½ of NW ¼ Sec. 33 T10N R10E
Receiving Water:	Unnamed tributaries within the Headwaters Yahara River Watershed, and ground waters of the state.
Stream Classification:	Yahara River 303d

Animal Units					
Animal Type	Current AU		Proposed AU (Note: If all zeroes, expansions are not expected during permit term)		
	Mixed	Individual	Mixed	Individual	Date of Proposed Expansion
Dairy Calves (under 400 lbs.)	69	0	0	0	
Milking and Dry Cows	1081	1104	0	0	
Heifers (400 lbs. to 800 lbs.)	120	200	0	0	
Heifers (800 lbs. to 1200 lbs.)	220	200	0	0	
Total	1490	1104	0	0	

Facility Description

Ron Ziegler Farm is an existing Concentrated Animal Feeding Operation (CAFO). **Ron Ziegler Farm** is owned and operated by **Ron Ziegler**. The farm currently has **1,490** animal units. **(772 milking & dry cows, 200 heifers up to 1200 lbs, 200 heifers up to 800 lbs and 347 dairy/beef calves)**. **Ron Ziegler Farm** has a total of **1,959** acres available for land application of manure and process wastewater. Of this acreage, **311** acres are owned, and **1,700** acres are rented or controlled through manure agreements. **Ron Ziegler Farm** has no planned expansion during the proposed permit term. Approximately **11,138,562 gallons** of manure and process wastewater and **1,076 tons** of solid manure in the first year of the permit term. The farm has a proposed **279 days** of liquid manure storage and at least 59 days of solid manure storage.

One facility is currently covered under **Ron Ziegler Farm** WPDES Permit. The main dairy site is located at N368 Hwy 51, Deforest, WI 53523 and is composed of 2 dairy freestall barns, milking parlor, calf barn, calf hutch areas, feed storage area with collection and VTA, and a waste storage facility with associated transfers.

Ron Ziegler Farm has submitted an application for reissuance of their Wisconsin Pollutant Discharge Elimination System (WPDES) permit. The application is complete, and the facility has been determined to be in substantial compliance. This will be the second permit reissuance for this facility. **Ron Ziegler Farm** has an approved Nutrient Management Plan (NMP) that is written according to WPDES permit and Chapter NR 243 Wis. Adm. Code requirements. **Ron Ziegler Farm** was also found to have at least 180 days of liquid manure storage.

Substantial Compliance Determination

Enforcement During Last Permit: The facility has had no enforcement actions taken during the previous permit term. The facility has completed all previously required actions as part of the permitting and / or enforcement process.

After a desk top review of all compliance schedule items and permit application materials, and a site visit on **July 23, 2020**, this facility has been found to be in substantial compliance with their current permit.

Sample Point Designation For Animal Waste		
Sample Point Number	Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable)	
001	Feed Storage Area & Runoff Control System: Sample point 001 is for visual monitoring and inspection of the feed storage area and associated runoff control system located at the feed storage area at Main Dairy at N368 Hwy 51, Deforest WI, 53532. Proper operation and maintenance is required to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to monitoring program. The runoff controls system is composed of the feed storage area, collection basin, WSF 5, WSF 6, and a Vegetated Treatment Area (VTA). WSF 5 captures the first flush from the feed storage area collection basin. As WSF 5 fills it overflows into WSF 6. WSF 5 is pumped to WSF 2 and WSF 6 is pumped to the VTA. An engineering evaluation of the feed storage area and runoff control system was submitted in 2017 and further action is required, see review letter R-2017-0063p and R-2017-0063i dated August 24,2017 for details and see Schedule Section for due dates.	
002	WSF 2: Sample point 002 is for liquid waste storage facility 2 (WSF 2) located at the Main Dairy at N368 Hwy 51, Deforest WI, 53532. WSF 2 is a clay-lined storage located southeast of the dairy freestalls on the east side of the production area. The facility has a capacity of 9.2 million gallons and was modified in 2015. This storage accepts manure and process wastewater from the freestall barns and feed storage runoff controls. WSF 2 was last evaluated in 2017 and further actions are required, see review letter R-2017-0063i dated August 24,2017 for details and see Schedules section for due dates.	
003	WSF 1: Sample point 003 is for liquid waste storage facility 1 (WSF 1) located at the Main Dairy at N368 Hwy 51, Deforest WI, 53532. WSF 1 is a concrete underground tank located on the north end of the parlor. The facility has a capacity of 36,239 gallons (36'4" x 16'8" x 8'8") and was constructed in 1999. This storage accepts manure and process wastewater from milking parlor. WSF 1 was last evaluated in 2017 and further actions are required, see review letter R-2017-0063i dated August 24,2017 for details and see Schedules section for due dates.	
004	WSF 3: Sample point 004 is for liquid waste storage facility 3 (WSF 3) located at the Main Dairy at N368 Hwy 51, Deforest WI, 53532. WSF 3 is an underground concrete transfer channel that is composed of three sections located under the south, center, and northern barns. The facility has a combined capacity of 137,807 gallons (South -17,441 gallons, Center- 102,400, North- 17,966 gallons) and was constructed in	

Sample Point Designation For Animal Waste		
Sample Point Number	Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable)	
	1999. This storage accepts manure and process wastewater from barns above and acts as reception and transfer to WSF 2. WSF 3 was last evaluated in 2017 and further actions are required, see review letter R-2017-0063i dated August 24,2017 for details and see Schedules section for due dates.	
005	Syrup Storage/Commodities Shed: this sample point is for the area that holds corn syrup in the commodities shed adjacent to FSA1. This facility will need a site assessment/condition report (and subsequent Department approval) to insure that none of that material is leaching to surface or groundwater if use of this area is continued.	
006	WSF 6: Sample point 006 is for liquid waste storage facility 6 (WSF 6) located at the Main Dairy at N368 Hwy 51, Deforest WI, 53532. WSF 6 is a liquid-tight concrete storage tank located at the southwest corner of the feed storage area. The facility has a capacity of 58,000 gallons and was constructed in 2012. This storage accepts process wastewater from feed storage area runoff controls reception basin and is then pumped to the VTA. WSF 6 was last evaluated in 2017 and further actions are required, see review letter R-2017-0063p dated August 24,2017 for details and see Schedules section for due dates.	
007	WSF 5: Sample point 007 is for liquid waste storage facility 5 (WSF 5) located at the Main Dairy at N368 Hwy 51, Deforest WI, 53532. WSF 5 is a precast liquid-tight concrete tank storage located at the south west end of the feed storage area, east of WSF 6 and west of the feed storage area. The facility has a capacity of 3000 gallons and was constructed in 2012. This storage accepts process wastewater from the feed storage area. WSF 5 was last evaluated in 2017 and further actions are required, see review letter R-2017-0063p dated August 24,2017 for details and see Schedules section for due dates.	
008	Miscellaneous Solid Manure: Sample point 008 is for solid manure sources that are directly land applied and not stored in a waste storage facility. This includes solid sources such as calf hutch manure, maternity pen bedpack, heifer bedpack, steer manure, solids removed from liquid waste storage facilities, etc. Representative samples shall be taken for each manure source type.	
009	Headland Stacked Solids: Sample point 009 is for solid manure stacked in approved headland stacking locations. Representative samples shall be taken of this manure prior to land application. Note: Headland stacking sites are subject to production site discharge limitations; weekly visual monitoring is required during use of stacking sites to ensure discharges meet permit requirements.	
010	Calf Hutch Area & Runoff Control System: Sample point 010 is for visual monitoring and inspection of the calf hutch area and associated runoff control system located along Hwy 51 around the west side of the production area at the Main Dairy at N368 Hwy 51, Deforest WI, 53532. Proper operation and maintenance is required to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to monitoring program. No engineered runoff controls are currently install and plans and specification shall be submitted according to the Schedules section of the permit, reference review letter R-2017-0063p dated August 27, 2017- PLANS AND SPECIFCATIONS REQUIRED.	
011	Storm Water Runoff Control System: Sample point 011 is for visual monitoring and inspection of all production site storm water conveyance systems. This includes roof gutter and downspout structures, drainage tile systems, grassed waterways and other diversion systems that transport uncontaminated storm water. Proper operation and maintenance is required to keep uncontaminated runoff diverted away from manure and process wastewater handling systems. Weekly inspections are required and shall be recorded according to monitoring program.	

1 Livestock Operations - Proposed Operation and Management

Production Area Discharge Limitations

Beginning on the effective date of the permit, the permittee may not discharge pollutants from the operation's production area (e.g., manure storage areas, outdoor animal lots, composting and leachate containment systems, milking center wastewater treatment/containment systems, raw material storage areas) to navigable waters, except in the event a 25-year, 24-hour rainfall event (or greater) causes the discharge from a structure which is properly designed and maintained to contain a 25-year, 24-hour rainfall event for this location as determined under s. NR 243.04. If an allowable discharge occurs from the production area, state water quality standards may not be exceeded.

Runoff Control

The permit requires control of contaminated runoff from all elements of the production area to prevent a discharge of pollutants to navigable waters in accordance with the Production Area Discharge Limitations and to comply with surface water quality standards and groundwater standards. Beginning on the effective date of this permit, (if needed) interim measures shall be implemented to prevent discharges of pollutants to navigable waters. In addition, permanent runoff control system(s) shall be designed, operated and maintained in accordance with the requirements found in USDA Natural Resources Conservation Service standards and ch. NR 243, Wis. Adm. Code. If any upgrading or modifications to runoff controls are necessary, formal engineering plans and specifications must be submitted to the Department for approval.

Manure and Process Wastewater Storage

The permit requires the operation to have adequate storage for manure and process wastewater and that storage or containment facilities are designed, operated and maintained to prevent overflows and discharges to waters of the state. In order to prevent overflows, the permittee must maintain levels of materials in liquid storage or containment facilities at or below certain levels including a one foot margin of safety that can never be exceeded. If any upgrading or modifications to the storage facilities are necessary, formal engineering plans and specifications must be submitted to the Department for approval.

The permittee currently has approximately 279 days of storage for liquid manure. The permittee will be required to design and construct 180 days of liquid manure storage by December 1, 2024. Once the permittee has 180 days of liquid manure storage, it must maintain 180 days of storage, unless temporary reductions in required storage are approved by the Department.

Solid Manure Stacking

The operation has proposed to stack solid manure. All stacking of solid manure shall be done in accordance ch. NR 243, Wis. Adm. Code, which includes restrictions from NRCS Standard 313. Stacking of manure is considered to be part of the production area and is subject to the Production Area Discharge Limitations.

Ancillary Service and Storage Areas

The permittee shall take preventative maintenance actions and conduct visual inspections to minimize pollutant discharges from areas of the operation that are not part of the production area or land application areas. These areas are called ancillary service and storage areas and include access roads, shipping and receiving areas, maintenance areas, refuse piles and CAFO outdoor vegetated areas.

Nutrient Management

With 1,490 animal units. (772 milking & dry cows, 200 heifers up to 1200 lbs, 200 heifers up to 800 lbs and 347 dairy/beef calves), it is estimated that approximately 11,138,562 of manure and process wastewater will be produced per year. The permittee owns approximately 311 acres of cropland and rents about 1,700. Given the rotation commonly used by the permittee, 1,959 acres are available (or open) to receive manure and process wastewater on an annual basis. The

permit requires all landspreading of manure and process wastewater be completed in accordance with an approved nutrient management plan. The permit will require sampling and analysis of manure and process wastewater that will be landspread. Landspreading rates must be adjusted based on sample analysis. The permit requires the permittee to maintain a daily log that documents landspreading activities. The permit also requires the submittal of an annual report that summarizes all landspreading activities. Plans must be updated annually to reflect cropping plans and other operational changes. Among the requirements, the plans must include detailed landspreading information including field by field nutrient budgets.

The permittee is required to implement a number of practices to address potential water quality impacts associated with the land application of manure and process wastewater. Among the permit conditions are restrictions on manure ponding, restrictions on runoff of manure and process wastewater from cropped fields, and setbacks from wells and direct conduits to groundwater (e.g., sinkholes, fractured bedrock at the surface). In addition, the permittee must implement a phosphorus based nutrient management plan that addresses phosphorus delivery to surface waters by basing manure and process wastewater applications on soil test phosphorus levels or the Wisconsin Phosphorus index. Additional phosphorus application restrictions apply to fields that are high in soil test phosphorus (>100 ppm).

The permittee must also implement conservation practices when applying manure near navigable waters and their conduits, referred to as the Surface Water Quality Management Area (SWQMA). These practices include a 100-foot setback from navigable waters and their conduits, a 35-foot vegetated buffer adjacent to the navigable water or conduit, or a practice that provides equivalent pollutant reductions equivalent to or better than the 100-foot setback.

In addition, the permittee must comply with restrictions on land application of manure and process wastewater on frozen or snow-covered ground. Included in these restrictions is a prohibition on surface applications of solid manure ($\geq 12\%$ solids) on frozen or snow-covered ground during February and March, non-emergency surface applications of liquid manure ($< 12\%$) on frozen or snow-covered ground are prohibited.

Monitoring and Sampling Requirements

The permittee must submit a monitoring and inspection program that outlines how the permittee will conduct self-inspections to determine compliance with permit conditions. These self-inspections include visual inspections of water lines, diversion devices, storage and containment structures and other parts of the production area. The permit requires periodic inspections and calibrations of landspreading equipment. The permittee must take corrective actions to problems identified inspections or otherwise notify the Department. Samples of manure, process wastewater and soils receiving land applied materials from the operation must also be collected and analyzed.

Sampling Points

The permit identifies the different sources of land applied materials (e.g., manure storage facilities, milking centers, egg-washing facilities) as “Sampling Points.” For these Sampling Points, the permittee is required to sample and analyze the different sources for nutrients and other parameters which serve as the basis for determining rates of application for these materials. Other areas are also identified as Sampling Points as a means of identifying them as areas requiring action by the permittee, such as an upgrade or evaluation of a certain system or structure (e.g., runoff control systems), even though sampling is not actually required.

Sample Point Number: 001- Feed Storage Runoff Controls; 005- Syrup Storage/Commodities Shed; 010- Calf Hutch Runoff Controls, and 011- Storm Water Runoff Controls

1.1.1 Changes from Previous Permit

Sample points 001 and 005 had their descriptions updated to better describe the facilities.

Sample points 010 and 011 were added to the permit to better describe the operation of the production area.

1.1.2 Explanation of Operation and Management Requirements

The is no required sampling for the runoff controls. Rather, there is required inspection and routine maintenance that should be recorded on a monitoring and inspection form or calendar. A copy of the inspection records shall be submitted with the Annual Report.

Sample Point Number: 002- WSF 2- Main Storage; 003- WSF 1- Parlor Tank; 004- WSF3 - Reception Channel; 006- WSF 6 FSA Runoff Collection; 007- WSF 5 FSA Firsrt Flush Collect

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Nitrogen, Total		lb/1000gal	2/Month	Grab	
Nitrogen, Available		lb/1000gal	2/Month	Calculated	
Phosphorus, Total		lb/1000gal	2/Month	Grab	
Phosphorus, Available		lb/1000gal	2/Month	Calculated	
Solids, Total		Percent	2/Month	Grab	

1.1.3 Changes from Previous Permit

Sample points 002, 003, and 004 had the description updated to better describe the facilities

Sample points 006 and 007 were added to the permit to better describe the operation of the current feed storage area runoff controls.

1.1.4 Explanation of Operation and Management Requirements

Waste shall be sample, stored, and land applied according to permit and nutrient management plan requirements per s. NR 243, Wis. Admin. Code.

Sample Point Number: 008- Miscellaneous Solid Manure and 009- Headland Stacking Sites

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Nitrogen, Total		lbs/ton	Quarterly	Grab	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Nitrogen, Available		lbs/ton	Quarterly	Calculated	
Phosphorus, Total		lbs/ton	Quarterly	Grab	
Phosphorus, Available		lbs/ton	Quarterly	Calculated	
Solids, Total		Percent	Quarterly	Grab	

1.1.5 Changes from Previous Permit

Sample points 008 and 009 were added to the permit to account for the solid manure generated at the production area.

1.1.6 Explanation of Operation and Management Requirements

Waste shall be sample, stored, and land applied according to permit and nutrient management plan requirements per s. NR 243, Wis. Admin. Code.

2 Schedules

2.1 Monitoring & Inspection Program

Use of the department's monitoring and inspection program template is encouraged, but optional.

Required Action	Due Date
Proposed Monitoring and Inspection Program: Consistent with the monitoring and sampling requirements subsection, the permittee shall update and submit a proposed monitoring and inspection program within 30 days of the effective date of this permit.	05/01/2022

2.2 Emergency Response Plan

Required Action	Due Date
Develop Emergency Response Plan: The permittee shall update and submit an emergency response plan within 30 days of the effective date of this permit.	05/01/2022

2.3 Nutrient Management Plan

Submit annual nutrient management plan (NMP) updates by March 31 of each year. Note, in addition to annual NMP updates, submit NMP amendments and substantial revisions to the department for written approval prior to implementation of any changes to the NMP.

Required Action	Due Date
Updated NMP Submittal: Submit any necessary updates to the Nutrient Management Plan to meet the conditions outlined in this permit (see conditions in the Livestock Operational and Sampling	05/01/2022

Requirements section), to include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	
Submit Annual NMP Update #1: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2023
Submit Annual NMP Update #2: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2024
Submit Annual NMP Update #3: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2025
Submit Annual NMP Update #4: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2026
Submit Annual NMP Update #5: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2027
Ongoing Management Plan Annual Updates: Continue to submit Annual Updates to the Nutrient Management Plan until permit reissuance has been completed, to include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	

2.4 Annual Reports

Submit annual reports by January 31 of each year in accordance with the annual reports subsection in standard requirements.

Required Action	Due Date
Submit Annual Report #1: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2023
Submit Annual Report #2: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2024
Submit Annual Report #3: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2025
Submit Annual Report #4: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2026
Submit Annual Report #5: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2027
Ongoing Annual Reports: Continue to submit Annual Reports until permit reissuance has been completed, to include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	

2.5 Calf Hutch Runoff Control System - Installation

Reference PLANS AND SPECIFICATIONS ARE REQUIRED Letter R-2017-0063p dated August 24, 2017.

Required Action	Due Date
Plans and Specifications: Submit plans and specifications for a permanent calf hutch area runoff control system for Department review and approval in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code. See Standard Requirements for plan content information.	10/01/2022
Complete Installation: Complete construction of runoff control system. System shall be functional and in operation by the specified Date Due. Post construction documentation shall be submitted within 60 days of completion of the project.	12/31/2023

2.6 Feed Storage - Engineering Evaluation

Reference PLANS AND SPECIFICATIONS ARE REQUIRED Letter R-2017-0063p and MORE INFORMATION IS REQUIRED Letter R-2017-0063i dated August 24, 2017.

Required Action	Due Date
Written Description of Existing System: Submit an engineering evaluation that includes a written description of the existing feed storage area and its adequacy to meet the conditions found in the Production Area Discharge Limitations subsection and NR 243.15, Wis. Adm. Code.	12/31/2022
Plans and Specifications: Submit plans and specifications for Department review and approval to permanently correct any adverse conditions identified as part of the engineering evaluation for the feed storage area in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code.	05/01/2023
Corrections and Post Construction Documentation: Complete construction of improvements to permanently correct any adverse conditions in concurrence with and approval by the Department, by the specified Date Due. Submit post construction documentation within 60 days of completion of the project.	12/01/2024

2.7 Manure Storage Facility - Engineering Evaluation

Reference MORE INFORMATION IS REQUIRED Letter R-2017-0063i dated August 24, 2017.

Required Action	Due Date
Written Report: Submit a written report evaluating the existing manure storage facility's ability to meet the conditions in the Production Area Discharge Limitations and Manure and Process Wastewater Storage subsections and s. NR 243.15, Wis. Adm. Code. (See Standard Requirements for report details.)	12/31/2022
Plans and Specifications: Submit plans and specifications for Department review and approval in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code, to permanently correct any adverse manure storage conditions.	05/01/2023
Corrections and Post Construction Documentation: Complete construction on the manure storage facility that permanently corrects any adverse conditions in concurrence with and approval by the Department, by the specified Date Due. Submit post construction documentation within 60 days of completion of the project.	12/01/2024

2.8 Manure Storage Facility - Installation of 180 Day Liquid Manure Storage

Reference PLANS AND SPECIFICATIONS ARE REQUIRED Letter R-2017-0063p dated August 24, 2017.

Required Action	Due Date
Submit Plans and Specifications: If changes in runoff collection are made submit Plans and specifications for a 180-day liquid manure storage facility for Department review and approval in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code. See Standard Requirements for plan content information.	05/01/2023
Complete Installation: Complete construction of the manure storage facility. The facility shall be functional and in operation by the specified Date Due. Post construction documentation shall be submitted within 60 days of completion of the project.	12/01/2024

2.9 Submit Permit Reissuance Application

Required Action	Due Date
Reissuance Application: Submit a complete permit reissuance application 180 days prior to permit expiration.	10/01/2026

2.10 Explanation of Schedules

Schedules are included in the permit to ensure compliance with s. NR 243, Wis. Admin. Code, requirements.

Most of the Schedule items are typical for a large dairy facility like this one. The schedules contained in 2.1, 2.2, 2.3, 2.4, and 2.9 are standard permit schedules.

Schedule sections 2.5, 2.6, 2.7, and 2.8 are being required as these facilities have further action required based on previous evaluations. See attachments for further details. Engineering evaluation or plans and specifications are required to determine if these facilities meet permit discharge limitations.

Special Reporting Requirements

None

Other Comments:

None

Attachments and Links:

Inspection Report with Map(s) – July 23, 2020

NMP Plan Approval Letter- December 3, 2021

Days of storage Approval Letter- December 15, 2020

Plans and Specification Letter- August 24, 2017

More Information Required- August 24, 2017

Application Materials:

- Application: [ePermitting - DocSetView \(wi.gov\)](#)
- Application Engineering: [ePermitting - DocSetViewDet \(wi.gov\)](#)
- Application NMP: [ePermitting - DocSetViewDet \(wi.gov\)](#)

Public Notice

Proposed Expiration Date:

March 31, 2027

Justification Of Any Waivers From Permit Application Requirements

None

Prepared By:

Eric Struck Agricultural Runoff Management Specialist

Date: [January 21, 2022](#)

CAFO Compliance Report (August 31, 2020)



Inspection Date: July 22, 2020

Inspection Type: Reissuance

Operation Name: Ron Ziegler Farm

WPDES Permit No. 0065919

Operation Address: N368 Hwy 51, Deforest WI, 53532

On-Site Representative(s): Ron and Julie Ziegler (owner operator)
Jess Ray – Outland Design (engineer)
Dave Buss- NuSolutions Agronomy LLC (crop consultant)
Cameron Fields- Michael Best (lawyer)

DNR Staff / Report Writer: Eric Struck- WDNR CAFO Specialist (writer)
Mark Cain - WDNR CAFO Specialist

Attachments: WDNR Review Letter Dated August 24, 2017; More information Required
WDNR Review Letter Dated August 24, 2017; Plans and Specifications are Required

On July 22, 2020 Wisconsin Department of Natural Resources (WDNR) CAFO specialist Mark Cain and Eric Struck met with representatives of Ron Ziegler Farm. The representatives include the owner Ron and Julie Ziegler, Engineer Jess Ray, Crop Consultant Dave Buss, Lawyer Cameron Fields, also present during the inspection were two of the farm's employees and banker, Brian Hoskies. The purpose of the inspection was for the reissuances of the WPDES Permit held by the Ron Ziegler Farm. The Ron Ziegler Farm currently houses 1717 animal units, composed of dairy cows and young stock. The Ron Ziegler Farm's WPDES permit expires on March 31, 2021. The reissuance application is due October 2, 2020. The Ron Ziegler farm has no plans for expansion during the next permit term. The inspection began about 1 pm and concluded around 3:30 pm. The weather the day of the inspection was clear, sunny, and temps in the upper 80's F. Roughly 1.5" of rain had fallen in the region in the week prior to the visit. Due to Covid 19 the inspection was limited to areas outside. The entire outdoor production area was inspected. There were discussions about the previous improvements and money spent on the farm to meet permit requirements, possible evaluations for the upcoming permit term, past evaluations, and overall operations at the Ron Ziegler Farm.

Ron Ziegler Farm consists of two dairy free stall barns, a milking parlor, calf barn, calf hutch area, feed storage area, old dairy barns with parlor, and a waste storage facility with gravity flow channels from the parlor and the free stall barn. No water samples were tanked during the inspection.



Map 1 Engineering Map of Ron Ziegler Farm, labeled facilities, expanded WSF 2 and free stall barn was completed in 2015

Feedlot Runoff

Ron Ziegler Farm no longer has any outdoor feedlots. All existing feedlots were empty and clean at the time of the inspection. The end of barn concrete slab in the picture is used for unloading lime when needed, and not for manure loading or storage.



Picture 2. Abandoned WSF 4 adjoining calf barn facing south west.



Picture 3. Southwest corner of calf barn, facing northwest.



Picture 4. Southeast corner of calf barn facing north.



Picture 5. East side of calf barn facing north, covered drive by feeding.



Picture 6. Old animals lots between FSA and old farm buildings, facing north. Picture 7. Empty feedlots near parlor, facing northwest.

Calf Hutch Areas

Ron Ziegler farm has a large calf hutch area that stretches along the west side of the production area, along Hwy 51. The calf hutches stretch from the parlor north past the calf barn, with a few between the freestall barns. The calf hutches do not have run off controls and are located near the roadside ditch. The ditches that run along Hwy 51 do lead to intermittent tributaries of the Yahara River. The farm uses wood chips as bedding in the exposed outdoor fenced area of the hutches, with some wood chips and sand inside of the calf hutches. The farm feels all runoff and animal waste is contained in the wood chips. The farm stated that the wood chips absorb the nutrients from the waste and that it does not leave the woodchips. The wood chips are changed regularly to avoid saturation. In the most recent annual report, it was stated that the wood chips were being taken to the Jim Herman Farm (WPDES Permit# WI-0064220). It has recently come to the departments attention that the Jim Herman Facility has been depopulated and is not being operated. The alternative distribution of the wood chip waste must be addressed in the nutrient management plan submitted with the permit application. Ron Ziegler Farm should notify the department of the interim practices used to dispose of and the storage of used woodchips.

There is an outstanding requirement for plans and specifications base on an engineering submittal from April 4, 2017 and should be addressed with the permit application. Please reference the noncompliant evaluation letter dated August 24, 2017 for details.



Picture 8. Calf hutch set up with fenced woodchips.



Picture 9. Line of calf hutches facing south, along HWY 51.



Picture 10. Calf hutches south of calf barn, facing south.



Picture 11. North end of calf hutches, south of calf barn.



Picture 12. Northern end of the calf hutch area, facing south. Picture 13. Northern end of calf hutches facing north.



Picture 14. Back side of northern end of the calf hutch area, facing south. Picture 15. Back side of northern end of calf hutches facing north.



Picture 16. Northside of hutches between freestall barn, facing southeast. Picture 17 Northside of hutches between freestall barn, facing north.



Picture 18. Southside of hutches between freestall barn, facing southeast. Picture 19 Southside of hutches between freestall barn, facing east.

Waste Storage Facilities

Ron Ziegler Farm has 6 waste storage facilities (WSF). WSF 4 has since been repurposed and is not used to store manure. The sample point for this storage will be inactivated in the proposed permit

WSF1 is a concrete holding tank that collects parlor and flush water from the milking area. This facility was evaluated in 2017 and further action is required as noted in the August 24, 2017 noncompliant evaluation letter. This facility was not inspected as it was indoors and underbarn.

WSF 2 is the main waste storage facility at the Ron Ziegler farm, it is a clay lined earthen storage, with one concrete agitation pad, with scour protection under the inlet pipes. The facility was evaluated in 2017 and further action is required to determine compliance. A safety fence was installed around the storage. A permanent marker was installed in the north west end of the storage. The marker was a large pole with concrete weighted tires on the end. The pole was numbered for each foot so that the farm can use a chart to calculate the given volume and days of storage. It was discussed to submit the chart with 180-day storage calculations and adding a maximum operating level marker. The storage did have well established vegetation around the top of the storage. The removal of trees, shrubs, and other plants that could harm the liner was discussed.

WSF3 is the underbarn channel of the north, south, and central barn. These channels act as transfers from the freestall barns to WSF2. The channels are flushed with water from WSF1. Further information is required from the 2017 evaluation to determine compliance. These channels were not visually inspected as they are underbarn and partially indoors.

WSF 5 and WSF 6 are part of the feed storage area runoff controls. WSF 6 is the leachate/first flush reception basin and collection tank and WSF 5 is larger storm runoff collection tank. Runoff from the feed storage area is directed to the leachate/first flush reception collection basin. The small outlet in the floor drains to WSF 6 collecting leachate and the first flush, which is then pumped to WSF 2. As the rainfall increases the reception basin fills until it reaches the height of the second larger side outlet. The second outlet drains to WSF 5. WSF 5 is then pumped to the VTA for treatment. At the time of the inspection there was evidence that the reception basin for WSF 6 had been breached in the past. The over topping had created a concentrated flow path to the ditch and culvert. The ditch leads to an unnamed tributary to the Yahara River (pictures 39-48, and Map 2). WSF 5 and WSF 6 were evaluated in 2017 and require further action, as noted in the Noncompliant evaluation letters dated August 24, 2017. It was discussed that Outland Design would be responding to the evaluation review and expected to show that the facility was able to contain all storms up to the 25-year 24-hour storm event and would show the system's ability to meet permit and code requirements. If they can't show containment, they plan to address changes to meet permit and code requirements.

Immediate action should be taken to ensure the collection area and storages do not over top to the ditch and waterway. Pictures are included in the feed storage area runoff section below.

Actions noted in the August 24, 2017 letter should be addressed with the permit application.



Picture 20. Permanent marker place in northwest end of WSF 2. Picture 21 Northeast side of WSF 2 facing north west.



Picture 22 At agitation ramp on northeast side facing south. Picture 23 At agitation ramp on northeast side facing southwest down ramp.

Process Wastewater (other than feed storage area leachate/runoff)

Process wastewater from the milking parlors is contained in WSF1 and is used to flush the transfer channels WSF 3.

Feed Storage Area Runoff

Ron Ziegler Farm has one feed storage area composed of 8 concrete walled feed bunkers, with concrete and asphalt floors. The floor had several areas in need of repair. There also was leachate observed coming from the walls in several locations. These areas of concern should be repaired before the bunkers are filled. The feed storage area runoff controls appear to have been bypassed and overtopped to a ditch that flows to a tributary to the Yahara river. This area should be monitored for blockages so that leachate and runoff does not leave the production area. The concrete of WSF 5 and WSF 6 appeared to be in good condition. Additional details about the operation of this system are included in the waste storage section above.

The VTA was mostly vegetated with some patchy areas near the first spreader bar lacking vegetation. Mowed grass was seen in the VTA, Ron had said they were unable to remove the cutting before the rain and conditions did not allow for the removal. Vegetation is normally removed after each cutting. The end of the VTA meets with the ditched waterway that surrounds the farm and leads to the tributary of the Yahara River.

The feed storage area and runoff controls were evaluated in 2017 and further action is required to determine compliance as noted in the August 25, 2017 noncompliant evaluation review letters.



Picture 24 Interior bunker wall facing north.



Picture 25. Interior bunker wall facing south.



Picture 26. Feed bunker floor, with cracks, facing south. Picture 27. Crack/hole in bunker floor.



Picture 28. Concrete flow channel of FSA runoff controls. Picture 29. Cracks in floor along concrete flow channel.



Picture 30. Tires stacked on east side of FSA, leachate observed. Picture 31. Leachate coming from behind tires stored on east side of FSA.



Picture 32. Leachate and dead vegetation from east side of FSA. Picture 33. Crack in bunker south bunker wall with leachate and dead vegetation.



Picture 34. Leachate flow path to runoff collection area, facing south. Picture 35. Collection basin of FSA, to WSF 6 (floor) or WSF 5 (west/right)



Picture 36. WSF 6, first flush collection, pumped to WSF 2. Picture 37. South side of WSF 5 facing west.



Picture 38. East side of WSF 5 facing north, pump to VTA. Picture 39. East side of WSF 5 inlet from collection basin.



Picture 40. FSA runoff collection basin, overtopped edge with feed solids. South end facing east.

Picture 41. Overtopped collection basin, feed solids, dead vegetation, and channelized flow paths.



Picture 42 FSA runoff collection basin facing south east, feed solids around pump and WSF 6



Picture 43, FSA runoff collection, facing east, feed waste and flow paths to waterway.



Picture 44. Overtopped collection basin, feed waste present and flow path over concrete wall to waterway



Picture 45. Flow path from overtopped collection basin to waterway and culverts, that pass under Hwy 51, facing south.



Picture 46. Feed waste from FAS Runoff collection area



Picture 47 Feed waste in waterway from FAS collection area. Facing east up waterway.



Picture 48 Facing west to HWY 51 where waterway crosses.



Picture 49. Waterway facing east from feed that reached waterway from FSA collection



Picture 50. South end of VTA spreader bar, facing north.



Picture 51 Mid way down VTA spreader bar, facing north, some solids remaining



Picture 52. North end of VTA spreader bar, feed and stone from spreader bar from cleaning.



Picture 52. Stone spreader bar on concrete apron of VTA



Picture 53. Looking east from about middle of first spreader bar at VTA, remains of mowing and some patchy vegetation.



Picture 54. Looking east from northern end of VTA spreader bar, missing vegetation and some mowed vegetation.



Picture 55 Looking out over the VTA from spreader bar, facing northeast.



Picture 536 Looking northwest over VTA and waterway around farm.



Picture 57. Eastern corner of VTA and waterway facing north to WSF2.



Picture 58 Northeast end of VTA facing northwest, waterway with standing water and end of VTA.



Picture 59. Facing north, southeast end of feed bunker, VTA pipe risers, and waterway that surrounds farm

Picture 60. Facing east to culverts for waterway to pass under HWY 51.

Animal Mortality Disposal

Ron Ziegler Farm uses Red Granite for the disposal for mortalities.

Ancillary Service Areas

Ron Ziegler farm has a large waterway that encircles the farm production area. This waterway leads to a tributary of the Yahara River. The culverts and driveways were clear of waste feed or manure, except the area surrounding the feed storage area runoff collection that had been over topped. Rain gutters were not observed on most buildings. One area adjoining the waterway had washed out for a second time this year and the farm plans to regrade and reseed the area as soon as conditions allow. The farm also no longer composts anything onsite.

During the walkover three wells were identified in the production area. Well waivers were not located for the current wells. Well waivers should be submitted with the permit application for wells within the 250 feet set back.



Picture 541. Facing northwest at waterway and calf barn. Picture 552. Facing northwest up waterway, area washed out by recent storms.



Picture 563 waterway around farm, facing northwest

Picture 574 Waterway around farm, facing south-southwest.

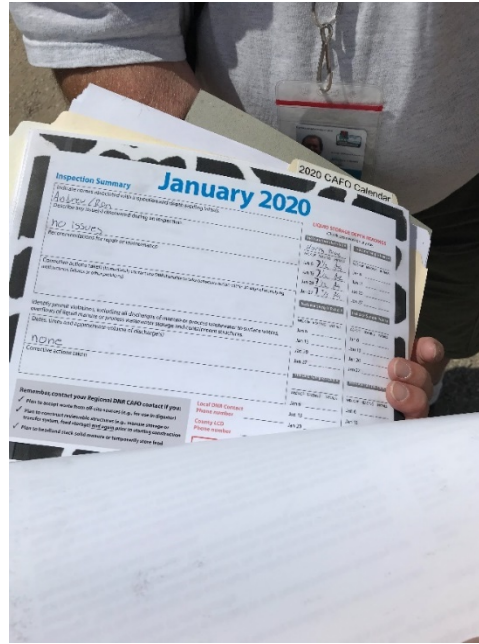
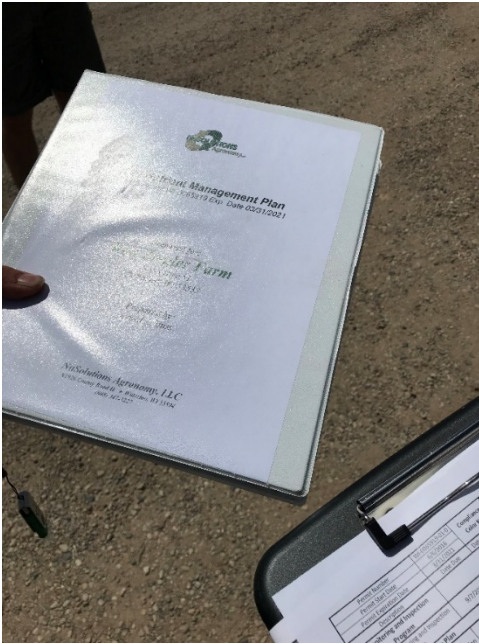
RECORDS REVIEW

The permittee has current WPDES Permit and Nutrient Management Plan onsite.

The permittee provided complete production site inspection records that are required to be retained.

The permittee provided adequate documentation that the facility has a minimum of 180 days of liquid manure storage capacity.

The permittee has copies of their emergency response and monitoring and inspection plans onsite.



Picture 585 Ron Zeigler Farms nutrient management plan. Picture 66 Ron Zeigler Farms CAFO calendar used to record inspections.

SUMMARY

Substantial Compliance

The permittee is in substantial compliance with the permit.

Areas of Concern

- Feed storage area runoff controls
- Feed storage area walls and floor
- Storage and Disposal of used woodchips
- Waste Storage facilities
- Well waivers

Permit Violations Alleged Noncompliance

- None identified during the inspection

Action Items

- Address the noncompliant evaluation letters dated August 24, 2017 for plans and specifications and further information, attached.
- Repair the feed storage area walls and floor
- Monitor the runoff collection of the feed storage area
- Provide a plan for storage and disposal of wood chips
- Submit evaluations and plans and specifications as listed above and noted in attached letters.
- Submit a complete permit application by October 2, 2020

Items for Next Permit Term

- Well waivers
- Feed storage area runoff controls
- Waste storage facilities
- Calf hutch area runoff controls
- Alternative distribution of used woodchips



August 24, 2017

FILE REF: R-2017-0063i
WPDES Permit #: WI-0065919

Ron Ziegler
Ron Ziegler Farm
N368 Hwy 51
DeForest, WI 53532

Subject: Noncompliant Evaluation Review for the Waste Storage, Waste Transfer, Feed Storage and Runoff Controls, Animal Lots and Vegetated Treatment Area at Ron Ziegler Farm, Sec 33, T10N, R10E, Leeds Township, Columbia County – MORE INFORMATION IS REQUIRED

Dear Mr. Ziegler:

The Division of External Services of the Wisconsin Department of Natural Resources (the Department) received an evaluation submitted on behalf of Ron Ziegler Farm by Adam Both, P.E., Outland Design, LLC on April 4, 2017. Department review was performed to determine if compliance is demonstrated in accordance with s. 243.16, Wis. Adm. Code, and applicable NRCS standards.

The facilities listed below were determined to not be in compliance due to insufficient information. A response letter must be submitted by September 18, 2017 to Jeff Kreider and the DNR CAFO specialist. The revised evaluation must address the items listed below. Please understand, the items listed below may not be an all-inclusive list, and it is your responsibility to demonstrate compliance with ch. NR 243, Wis. Adm. Code, and applicable NRCS Standards. Questions concerning the review may be directed to Jeff Kreider, and questions concerning timelines and permit issues may be directed to the DNR CAFO Specialist. (Contact information at the end of this letter.)

Waste Collection Facility 1 (WCF1): Not in compliance with s. NR 243.15(3), Wis. Adm. Code.

- This is a parlor wastewater flushing tank that was constructed in 1999 and has a maximum capacity of 36,239 gallons. The evaluation did not provide the date of the NRCS Standard 634 that was used to demonstrate compliance.
- The report states under Site Observations that "Observations of the piping and visible portions of the concrete structure were made." It does not clarify what was visible.

Waste Storage Facility 2 (WCF2): Not in compliance with s. NR 243.15(3), Wis. Adm. Code. The evaluation provided the date of the NRCS Standard 313 that was used to demonstrate compliance was January 2014. This storage facility was constructed in 1999 and later it was expanded in 2015.

- Include the data locations for the permeability tests that were completed.
- Provide test pit logs that demonstrate the storage pond meets separation requirements.
- Provide photo documentation that permanent markers are installed in accordance with s. NR 243.15(3)(e), Wis. Adm. Code.

Under Barn Reception Channels [South, Central and North Barns] (WCF3): Not in compliance with s. NR 243.15(3), Wis. Adm. Code. This storage facility was constructed in 1999 with a maximum capacity of 17,441 gallons. A 24 inch gravity flow pipe transfers liquid manure to WCF2. An 8 inch SCH 40 pressure pipe is connected to the channel for flushing.

- The report states under Site Observations that "Observations of the piping and visible portions of the concrete structure were made." It does not clarify what was visible.
- Separation requirements were not demonstrated.
- The evaluation stated that the NRCS Standard used to demonstrate compliance was 11/04, which does not meet the minimum requirements stipulated in ch. NR 243.

Feed Storage: Not in compliance with s. NR 243.15 (2), (3)(d) and (9), Wis. Adm. Code and s. NR 213, Wis. Adm. Code. The feed storage area and runoff controls were constructed in 2012 and is 106,600 ft². The total runoff volume collected is 0.05 inches of a storm event.

- The report states under Site Observations that “Observations of the piping and visible portions of the concrete structure were made.” It does not clarify what was visible.
- The report falsely claims, “...the requirements of NR 243 and the draft guidance indicate NRCS 635 wasn’t intended to meet the ‘zero discharge’ requirement”. Ch. NR 243 specifically states in several locations that a discharge from the production area is not allowed.
- A berm and pump system is proposed in the evaluation, however it does not indicate if it would be designed for a 25 year / 24 hour storm event.
- No information was provided concerning the feed storage area to demonstrate compliance.

Vegetated Treatment Area (VTA): Not in compliance with s. NR 243.15(2) and (9), Wis. Adm. Code. The VTA was constructed in 2012.

- It must be determined whether the feed storage’s runoff control system, of which the VTA is a part of, allows pollutant discharges to navigable water. This can be done either by assessing whether the runoff from the end of the VTA reaches navigable waters (including during extreme rain events) or whether the runoff management system is able to contain runoff from the feed pad up to the 25 year / 24 hour runoff event. This system must also be protective of groundwater quality.
- Areas of the VTA are channelized. Sheet flow is required to be maintained across the entire width and length of the VTA.
- Photo documentation shows that the VTA is ponding.

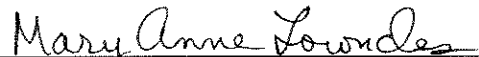
Animal Lots near Parlor: Not in compliance with s. NR 243.15(2) and (9), Wis. Adm. Code.

- No evaluation information was provided.
- The well located about 50 feet from the animal lots requires a well waiver.

Composting: Not in compliance with s. NR 243.15(8), NR 502.04(2)(d) and NR 502.12, Wis. Adm. Code.

- No evaluation information was provided.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES



Mary Anne Lowndes
Chief, Runoff Management Section
Bureau of Watershed Management



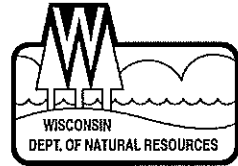
Jeff C. Kreider
Water Resources Engineer
Bureau of Watershed Management

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Kurt Calkins; County Conservationist
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Mike Carlson; DNR CAFO Specialist
DNR, South Central Region
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Jeff Kreider
DNR, Madison Office
(608) 266-0856; jeff.kreider@wisconsin.gov



August 24, 2017

FILE REF: R-2017-0063p
WPDES Permit #: WI-0065919

Ron Ziegler
Ron Ziegler Farm
N368 Hwy 51
DeForest, WI 53532

Subject: Noncompliant Evaluation Review for the Animal Lots at Ron Ziegler Farm, Sec 33, T10N, R10E, Leeds Township, Columbia County – PLANS AND SPECIFICATIONS ARE REQUIRED

Dear Mr. Ziegler:

The Division of External Services of the Wisconsin Department of Natural Resources (the Department) received an evaluation submitted on behalf of Ron Ziegler Farm by Adam Both, P.E., Outland Design, LLC on April 4, 2017. Department review was performed to determine if compliance is demonstrated in accordance with s. 243.16, Wis. Adm. Code, and applicable NRCS standards.

The facilities listed below were determined to not be in compliance due to the facilities not meeting s. NR 243.15, Wis. Adm. Code, and applicable NRCS Standards. Plans and specifications must be submitted according to the due dates within the Schedules section of the WPDES permit or due date listed in an enforcement notice via the DNR's e-Permitting system at <http://dnr.wi.gov/permits/water/>. Questions concerning the review may be directed to Jeff Kreider, and questions concerning timelines and permit issues may be directed to the DNR CAFO Specialist. (Contact information at the end of this letter.)

Feed Storage: Not in compliance with s. NR 243.15 (2), (3)(d) and (9), Wis. Adm. Code and s. NR 213, Wis. Adm. Code. The feed storage area and runoff controls were constructed in 2012 and is 106,600 ft². The total runoff volume collected is 0.05 inches of a storm event. Plans and specifications are required for runoff controls.

- Two reception structures, WCF5 and WCF6 are used to contain runoff from the feed storage. No information was provided that shows that these structures are adequately sized for the feed storage area. The existing runoff control system can only collect up to 0.1 inches of a storm event. However ch. NR 243, Wis. Adm. Code, requires containment up to a 25 year / 24 hour storm event. The existing runoff controls are not adequate to contain a 25 year / 24 hour storm event.

Calf Hutch Areas (Animal Lots): Not in compliance with s. NR 243.15(2) and (9), Wis. Adm. Code. Three locations of animal lots exist: 1) along Hwy 51 north end of production area, 2) along Hwy 51 towards barn and between two freestall barns. Plans and specs are required for the animal lot location(s) and runoff controls.

- No runoff controls exist and plans and specs are required.
- Runoff flows into a ditch along Hwy 51 and eventually into the Yahara River.
- Calf hutches area placed on permeable soils.

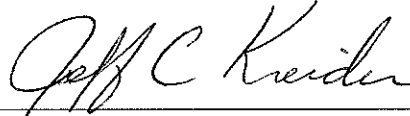
Days of Available Storage: Not in compliance with s. NR 243.15(3)(i) to (k), Wis. Adm. Code.

- Although the report states that there are 222 days of storage, the report does not show that there is 100% containment from the production area. Therefore, provide tables and/or spreadsheets that include storage volume calculations, storage volumes and all inputs to the waste storage pond(s) and other supporting documentation. Ensure that the provided calculations include up to a 25 year / 24 hour storm event and that storage volumes are based on the maximum operating level (MOL).

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES



Mary Anne Lowndes
Chief, Runoff Management Section
Bureau of Watershed Management



Jeff C. Kreider
Water Resources Engineer
Bureau of Watershed Management

Email: Adam Both; Outland Design LLC
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(608) 742-9670; kurt.calkins@co.columbia.wi.us

Mike Carlson; DNR CAFO Specialist
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Jeff Kreider; DNR, Madison Office
(608) 266-0856; jeff.kreider@wisconsin.gov



December 3rd, 2021

Columbia County
Approval

Ron Ziegler
Ron Ziegler Farm
N368 Hwy 51
DeForest, WI 53532

SUBJECT: Conditional Approval of Ron Ziegler Farm Nutrient Management Plan, WPDES Permit
No. 0065919-02-0

Dear Mr. Ziegler:

After completing a review of Ron Ziegler Farm 2022-2026 Nutrient Management Plan (NMP) the Wisconsin Department of Natural Resources (Department) is providing conditional approval that it is consistent with Nutrient Management Requirements in s. NR 243, Wis. Adm. Code. This part of your WPDES permit application is now ready for the public notice and comment process as required by Ch. 283 Stats.

Before applying manure onto approved fields each season, the Department recommends Ron Ziegler Farm review the NMP with those individuals involved with manure applications to ensure all remain familiar with the approved manure spreading protocol, spreading maps, field and map verification, record keeping requirements, and all the conditions of this approval. Specifically, some fields in Ron Ziegler Farm may have:

- Soils that may have bedrock or groundwater within 24 inches of surface,
- Multiple setback areas due to streams, conduits to streams, grassed waterways, wetlands or wells, and
- Evidence of possible soil erosion/flow channels. Note: road ditches or other man-made channels may be considered flow channels or conduits to navigable water and may be subject to a SWQMA and setback.

Reviewing the NMP and checking fields for these features and soil conditions prior to manure applications will help Ron Ziegler Farm maintain compliance with their WPDES permit and Ch. NR 243 requirements.

FINDINGS OF FACT

The Department confirms that:

1. A current dairy herd size of 1,490 animal units (772 milking & dry cows, 400 heifers, and 347 calves). Currently there are no planned expansions in the next permit term.
2. Manure generation and spreading records indicate your herd will annually generate approximately 11,138,562 gallons of manure and process wastewater and 1,076 tons of solid manure in the first year of the permit term.
3. The use of application restriction options 1, 2 and 5 within surface water quality management areas.
4. The use of phosphorus delivery method P Index.
5. That Ron Ziegler Farm currently has 2011 acres (311 owned and 1700 controlled through contracts, rental agreements or leases, or under manure agreements) of which 1,959 are spreadable acres.

6. That some fields included in the NMP are directly adjacent to or have high potential to deliver nutrients and sediment to Yahara River (listed 303(d) impaired water by 'total phosphorus').
7. That no fields are directly adjacent to or have high potential to deliver nutrients and sediment to outstanding/exceptional waters.
8. That 2 fields are tiled.
 - HM2
 - HM3
9. That all fields will be checked for the following features prior to/during manure or process wastewater applications: soil areas with possible shallow groundwater (i.e., within 24 inches of surface) at the time of manure application; required setbacks associated with wells, navigable waters, conduits to navigable waters, grassed waterways, wetlands, possible soil erosion/flow channels.
10. That surface applications of manure will not be completed when precipitation capable of producing runoff is forecasted within 24 hours of the time of planned application.

CONDITIONAL NUTRIENT MANAGEMENT PLAN APPROVAL

The Department hereby approves the 2022-2026 Ron Ziegler Farm Nutrient Management Plan subject to the following conditions and the applicable requirements of Ch. NR 243, Wis. Adm. Code:

FIELD AND MANURE MANAGEMENT

1. Fields not included in the NMP and new fields shall not receive manure or process wastewater applications until they have been properly soil sampled, entered into Snap Plus, evaluated for their nutrient needs, and approved by the Department.
2. The following fields have also been approved to receive industrial, municipal, or septage waste:

Field Name	Other Permittee Name	Other Permittee Field Name	DNR #
GW1 & GW2	Grande Cheese Corp-Wyocena	FRE-748/749	49291/49292
H1	Grande Cheese Corp-Wyocena	FRA-741	49283
H2	Grande Cheese Corp-Wyocena	FRA-740/741	49282/49283
H3	Grande Cheese Corp-Wyocena	FRA-740	49282
H4	Grande Cheese Corp-Wyocena	FRA-740	49282
Jo3	Grande Cheese Corp-Wyocena	FRA-802	73119

Prior to any manure applications on these fields Ron Ziegler Farm shall contact the entities listed above to obtain recent spreading records and make the necessary adjustments to the planned manure application rates. At the end of each year Ron Ziegler Farm shall contact each entity listed above to obtain spreading records from the previous year so that they can be properly tracked in the NMP. Please Note: Ron Ziegler Farm is responsible for obtaining nutrient content values for all other wastes spread on any field in their NMP.

3. The following fields are prohibited from receiving applications of manure or process wastewater:
 - 1B (default soil test)
 - CS1 (default soil test)
 - GS1 (default soil test)

- | | | |
|---------------------------|---------------------------------|----------------------------------|
| - GS2 (default soil test) | - GW1(East) (default soil test) | - GW2 (West) (default soil test) |
| - HZ1 (default soil test) | - HZ2 (default soil test) | - HZ3 (default soil test) |
| - HZ4 (default soil test) | - HZ5 (default soil test) | - Jo3 (default soil test) |

If Ron Ziegler Farm wishes to use these fields for applications of manure or process wastewater all necessary information shall be submitted to the Department prior to application to demonstrate compliance with NR 243 and other applicable codes. Written Department approval amending this condition approval must be received prior to application.

4. If existing fields yield a soil test results equal to or greater than 200 ppm P, those fields would be prohibited from receiving manure or process wastewater applications, unless you obtain Department approval in accordance with NR 243.14(5)(b)2., Wis. Adm. Code.
5. All liquid manure samples collected may be analyzed, at a minimum, for percent dry matter, total nitrogen, percent $\text{NH}_4\text{-N}$, percent $\text{NO}_3\text{-N}$, phosphorus, potassium, and sulfur.
6. If manure sample results have a dry matter (DM) content less than 2.0% and the percent ammonium (NH_4^+) is greater than 75% of the total N, Ron Ziegler Farm may use the following equation to adjust the first year available nitrogen when applications are injected or incorporated within 1 hour:

$$\text{First-Year Available N} = \text{NH}_4\text{-N} + [0.25 \times (\text{Total N} - \text{NH}_4\text{-N})]$$

7. Ron Ziegler Farm shall record daily manure applications by using form 'Daily Spreading Log for Manure Applicators'. These forms shall be retained at the farm and provided to the department upon request.
8. Ron Ziegler Farm shall annually submit a spreading report that summarizes the land application activities listed under NR 243.19(3)(c)5., Wis. Adm. Code by using 'Annual Spreading Report for Concentrated Animal Feeding Operations' as generated by Snap Plus.

WINTER SPREADING

9. Liquid manure applications during winter conditions, as defined by NR 243.14(7), Wis. Adm. Code, are prohibited with the exception of emergency applications.
10. The following field(s) are approved for winter spreading solid manure, emergency applications of liquid manure and frozen liquid manure:

- CS1	- H1	- H2
- H4	- GS1	- GS2
- GW1 (East)	- GW2 (West)	- HZ5
- Home2	- Home3	- J1
- J2	- J2A	- KS1
- St1	- VP2	- VP2B
- HK3	- HK4	
11. Winter spreading of solid and liquid manure may not occur during the "high risk runoff period" pursuant to s. NR 243.14(6)(c) and NR 243.14(7)(c), respectively.
12. Winter applications of liquid manure shall only occur under emergency situations, after notifying the Department and receiving verbal approval.

13. Liquid applications shall be limited to 3,500 gallons per acre or 30 lbs. P per acre, whichever is less, on slopes 2-6% and 7,000 gallons per acre or 60 lbs. P per acre, whichever is less, on slopes 0-2%. Winter applications of solid manure shall be limited to 60 lbs. P per acre.

HEADLAND STACKING

14. The following headland stacking sites are approved for manure > 32% solids and only allowed for use during February and March, or when the ground is not frozen, or snow covered:
- Site 1
 - Site 2
 - Site 3
 - Site 4

MANURE & PROCESS WASTEWATER IRRIGATION

15. Irrigation of manure or process wastewater is prohibited.

SUBMITAL AND RECORDKEEPING REQUIREMENTS

16. A copy of this conditional approval shall be included in all future annual Nutrient Management Plan Updates in addition to the NR 243 and NRCS 590 checklists.

This conditional approval does not limit the Department's regulatory authority to require NMP revisions (based upon new information or manure irrigation research findings) or request additional information in order to confirm or ensure your farm operation remains in compliance with NR 243 and your WPDES permit conditions. If additional information, project changes or other circumstances indicate a possible need to modify this approval, the Department may ask you to provide further information relating to this activity.

Please keep in mind that approval by the Department of Natural Resources – Runoff Management Program does not relieve you of obligations to meet all other applicable federal, state or local permits, zoning and regulatory requirements.

If you have any questions regarding this approval I can be reached at 608-212-8460 or Ashley.Scheel@Wisconsin.gov.

Sincerely,



Ashley Scheel, CCA
WDNR Nutrient Management Plan Reviewer
Wisconsin Department of Natural Resources

cc: Eric Struck, WDNR Agricultural Runoff Specialist (Eric.Struck@Wisconsin.gov)
Laura Bub, WDNR Watershed Field Supervisor (Laura.Bub@Wisconsin.gov)
Christopher Clayton, WDNR Runoff Management Section Chief (Christopher.Clayton@Wisconsin.gov)
Aaron O'Rourke, WDNR Nutrient Management Program Coordinator (Aaron.Orourke@Wisconsin.gov)

Tony Salituro, WDNR Intake Specialist (Anthony.Salituro@Wisconsin.gov)
Amy Piaget, Dane County (Piaget.Amy@Countyofdane.com)
Kurt Calkins, Columbia County (Kurt.Calkins@Co.Columbia.Wi.Us)
Dave Buss, NuSolutions Agronomy, LLC (Dbuss@Nusolutionsag.com)
File



December 15, 2020

FILE REF: R-2020-0193
WPDES Permit #: WI-0065919

Ron Ziegler
Ron Ziegler Farms
N368 Hwy 51
Deforest, WI 53523

Subject: Evaluation Review for Days of Storage for Ron Ziegler Farms, NW¼ Sec 33, T10N, R10E,
Leeds Township, Columbia County – NO ADDITIONAL ACTION REQUIRED

Dear Mr. Ziegler:

This letter is to inform you that the Wisconsin Department of Natural Resources (Department) has completed its review of the calculation of days of storage submitted under certification by Adam Both, P.E., Outland Design LLC on October 5, 2020 on behalf of Ron Ziegler Farms.

The Department reviewed the submitted calculations in accordance with s. NR 243.16(1)(c), Wis. Adm. Code. Under s. NR 243.16(3), Wis. Adm. Code, the Department may require additional practices, conditions, or permittee actions based on Department review of the submitted evaluation. For the following liquid manure storage calculations, the Department has determined **no additional actions** on your part are required.

Days of Available Liquid Waste Storage: The submitted information states that Ron Ziegler Farms has 279 days of liquid waste storage based on the volumes listed in the table below with respect to s. NR 243.15(3)(i) to (k), Wis. Adm. Code. The current number of animal units provided for the calculation is 1,421. The liquid waste volumes are based on the NRCS spreadsheet and other estimated or calculated values and a collection period of 365 days. The first 0.05' flush is currently collected from the existing feed storage area on site.

Total Liquid Waste Storage:	11,917,769 gallons
Total Solids Storage	633,399 gallons
Total 25-yr, 24-hr Precip. on Storage	445,691 gallons
Total 25-yr, 24-hr Collected Runoff	0 gallons
Total Freeboard Vol.	2,277,917 gallons
Total MOL Liquid Waste Storage:	8,560,762 gallons

Manure and Bedding:	7,185,924 gallons
Parlor Wastewater	1,882,116 gallons
Total Feed Storage Leachate:	103,596 gallons
Total Feed Storage Runoff Collected (0.05'):	181,326 gallons
Net Precipitation on Storage Surfaces:	1,854,003 gallons
Total Liquid Waste Stored Below the MOL	11,206,965 gallons

Should you have any questions, please contact Tony Salituro, DNR Madison office or your regional CAFO Specialist.

NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to WIS. STAT. §§ 227.52 and 227.53, you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review must name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to WIS. STAT. § 227.42, you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with WIS. ADMIN. CODE § NR 2.05(5), and served on the Secretary in accordance with WIS. ADMIN. CODE § NR 2.03. The filing of a request for a contested case hearing does not extend the 30-day period for filing a petition for judicial review.

**STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES**

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August 24, 2017

FILE REF: R-2017-0063p
WPDES Permit #: WI-0065919

Ron Ziegler
Ron Ziegler Farm
N368 Hwy 51
DeForest, WI 53532

Subject: Noncompliant Evaluation Review for the Animal Lots at Ron Ziegler Farm, Sec 33, T10N, R10E, Leeds Township, Columbia County – PLANS AND SPECIFICATIONS ARE REQUIRED

Dear Mr. Ziegler:

The Division of External Services of the Wisconsin Department of Natural Resources (the Department) received an evaluation submitted on behalf of Ron Ziegler Farm by Adam Both, P.E., Outland Design, LLC on April 4, 2017. Department review was performed to determine if compliance is demonstrated in accordance with s. 243.16, Wis. Adm. Code, and applicable NRCS standards.

The facilities listed below were determined to not be in compliance due to the facilities not meeting s. NR 243.15, Wis. Adm. Code, and applicable NRCS Standards. Plans and specifications must be submitted according to the due dates within the Schedules section of the WPDES permit or due date listed in an enforcement notice via the DNR's e-Permitting system at <http://dnr.wi.gov/permits/water/>. Questions concerning the review may be directed to Jeff Kreider, and questions concerning timelines and permit issues may be directed to the DNR CAFO Specialist. (Contact information at the end of this letter.)

Feed Storage: Not in compliance with s. NR 243.15 (2), (3)(d) and (9), Wis. Adm. Code and s. NR 213, Wis. Adm. Code. The feed storage area and runoff controls were constructed in 2012 and is 106,600 ft². The total runoff volume collected is 0.05 inches of a storm event. Plans and specifications are required for runoff controls.

- Two reception structures, WCF5 and WCF6 are used to contain runoff from the feed storage. No information was provided that shows that these structures are adequately sized for the feed storage area. The existing runoff control system can only collect up to 0.1 inches of a storm event. However ch. NR 243, Wis. Adm. Code, requires containment up to a 25 year / 24 hour storm event. The existing runoff controls are not adequate to contain a 25 year / 24 hour storm event.

Calf Hutch Areas (Animal Lots): Not in compliance with s. NR 243.15(2) and (9), Wis. Adm. Code. Three locations of animal lots exist: 1) along Hwy 51 north end of production area, 2) along Hwy 51 towards barn and between two freestall barns. Plans and specs are required for the animal lot location(s) and runoff controls.

- No runoff controls exist and plans and specs are required.
- Runoff flows into a ditch along Hwy 51 and eventually into the Yahara River.
- Calf hutches area placed on permeable soils.

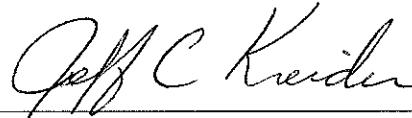
Days of Available Storage: Not in compliance with s. NR 243.15(3)(i) to (k), Wis. Adm. Code.

- Although the report states that there are 222 days of storage, the report does not show that there is 100% containment from the production area. Therefore, provide tables and/or spreadsheets that include storage volume calculations, storage volumes and all inputs to the waste storage pond(s) and other supporting documentation. Ensure that the provided calculations include up to a 25 year / 24 hour storm event and that storage volumes are based on the maximum operating level (MOL).

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES



Mary Anne Lowndes
Chief, Runoff Management Section
Bureau of Watershed Management



Jeff C. Kreider
Water Resources Engineer
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August 24, 2017

FILE REF: R-2017-0063i
WPDES Permit #: WI-0065919

Ron Ziegler
Ron Ziegler Farm
N368 Hwy 51
DeForest, WI 53532

Subject: Noncompliant Evaluation Review for the Waste Storage, Waste Transfer, Feed Storage and Runoff Controls, Animal Lots and Vegetated Treatment Area at Ron Ziegler Farm, Sec 33, T10N, R10E, Leeds Township, Columbia County – MORE INFORMATION IS REQUIRED

Dear Mr. Ziegler:

The Division of External Services of the Wisconsin Department of Natural Resources (the Department) received an evaluation submitted on behalf of Ron Ziegler Farm by Adam Both, P.E., Outland Design, LLC on April 4, 2017. Department review was performed to determine if compliance is demonstrated in accordance with s. 243.16, Wis. Adm. Code, and applicable NRCS standards.

The facilities listed below were determined to not be in compliance due to insufficient information. A response letter must be submitted by September 18, 2017 to Jeff Kreider and the DNR CAFO specialist. The revised evaluation must address the items listed below. Please understand, the items listed below may not be an all-inclusive list, and it is your responsibility to demonstrate compliance with ch. NR 243, Wis. Adm. Code, and applicable NRCS Standards. Questions concerning the review may be directed to Jeff Kreider, and questions concerning timelines and permit issues may be directed to the DNR CAFO Specialist. (Contact information at the end of this letter.)

Waste Collection Facility 1 (WCF1): Not in compliance with s. NR 243.15(3), Wis. Adm. Code.

- This is a parlor wastewater flushing tank that was constructed in 1999 and has a maximum capacity of 36,239 gallons. The evaluation did not provide the date of the NRCS Standard 634 that was used to demonstrate compliance.
- The report states under Site Observations that "Observations of the piping and visible portions of the concrete structure were made." It does not clarify what was visible.

Waste Storage Facility 2 (WCF2): Not in compliance with s. NR 243.15(3), Wis. Adm. Code. The evaluation provided the date of the NRCS Standard 313 that was used to demonstrate compliance was January 2014. This storage facility was constructed in 1999 and later it was expanded in 2015.

- Include the data locations for the permeability tests that were completed.
- Provide test pit logs that demonstrate the storage pond meets separation requirements.
- Provide photo documentation that permanent markers are installed in accordance with s. NR 243.15(3)(e), Wis. Adm. Code.

Under Barn Reception Channels [South, Central and North Barns] (WCF3): Not in compliance with s. NR 243.15(3), Wis. Adm. Code. This storage facility was constructed in 1999 with a maximum capacity of 17,441 gallons. A 24 inch gravity flow pipe transfers liquid manure to WCF2. An 8 inch SCH 40 pressure pipe is connected to the channel for flushing.

- The report states under Site Observations that "Observations of the piping and visible portions of the concrete structure were made." It does not clarify what was visible.
- Separation requirements were not demonstrated.
- The evaluation stated that the NRCS Standard used to demonstrate compliance was 11/04, which does not meet the minimum requirements stipulated in ch. NR 243.

Feed Storage: Not in compliance with s. NR 243.15 (2), (3)(d) and (9), Wis. Adm. Code and s. NR 213, Wis. Adm. Code. The feed storage area and runoff controls were constructed in 2012 and is 106,600 ft². The total runoff volume collected is 0.05 inches of a storm event.

- The report states under Site Observations that “Observations of the piping and visible portions of the concrete structure were made.” It does not clarify what was visible.
- The report falsely claims, “...the requirements of NR 243 and the draft guidance indicate NRCS 635 wasn’t intended to meet the ‘zero discharge’ requirement”. Ch. NR 243 specifically states in several locations that a discharge from the production area is not allowed.
- A berm and pump system is proposed in the evaluation, however it does not indicate if it would be designed for a 25 year / 24 hour storm event.
- No information was provided concerning the feed storage area to demonstrate compliance.

Vegetated Treatment Area (VTA): Not in compliance with s. NR 243.15(2) and (9), Wis. Adm. Code. The VTA was constructed in 2012.

- It must be determined whether the feed storage’s runoff control system, of which the VTA is a part of, allows pollutant discharges to navigable water. This can be done either by assessing whether the runoff from the end of the VTA reaches navigable waters (including during extreme rain events) or whether the runoff management system is able to contain runoff from the feed pad up to the 25 year / 24 hour runoff event. This system must also be protective of groundwater quality.
- Areas of the VTA are channelized. Sheet flow is required to be maintained across the entire width and length of the VTA.
- Photo documentation shows that the VTA is ponding.

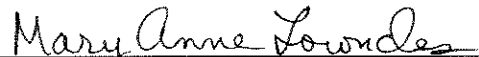
Animal Lots near Parlor: Not in compliance with s. NR 243.15(2) and (9), Wis. Adm. Code.

- No evaluation information was provided.
- The well located about 50 feet from the animal lots requires a well waiver.

Composting: Not in compliance with s. NR 243.15(8), NR 502.04(2)(d) and NR 502.12, Wis. Adm. Code.

- No evaluation information was provided.

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